

5. (Currently Amended) A rod lens as in claim 1 ~~any one of the foregoing claims~~, wherein on the end segment of the lens, between the optically active area (6) and the radial peripheral surface, a facet (8) is configured, which has at least one smooth surface area.
6. (Currently Amended) A rod lens as in claim 1 ~~any one of the foregoing claims~~, wherein the at least one smooth surface section (3') has a reflecting surface or is polished.
7. (Currently Amended) A rod lens as in claim 6, wherein the at least one smooth surface section (3') is polished according to ISO Norm Class P1 or more finely.
8. (Currently Amended) A method for producing a rod lens with a surface that has at least one optically active area (6) and, on its radial periphery, at least one optically inactive area (7, 8), wherein at least one surface section (3') of the optically inactive surface is smoothed on at least one axial end segment of the lens.
9. (Currently Amended) A method for producing a bone-shaped rod lens (3) with a surface that has at least one optically active area (6) and, on its radial periphery, at least one optically inactive area (7, 8), with the axial end segments of the rod lens having a greater diameter than the inner segment of the rod lens, wherein at least one surface section (3') of the optically inactive area is smoothed on at least one peripheral surface that is of greater diameter.
10. (Currently Amended) A method as in ~~either of claims 8 or~~ claim 9, wherein the at least one surface section (3', 8) is polished.
11. A method as in claim 10, wherein the polishing is performed with a polishing agent carrier on a pitch base, laminated fabric base, polyurethane sheet base, felt base, synthetics base, and/or cast resin base and with a polishing agent that includes a metal oxide or diamond.

12. (Currently Amended) A method as in ~~any one of claims 8 to~~ claim 11, wherein the method is a polishing by means of high-speed grinding.

13. (Currently Amended) A method as in ~~either of claims 8 or~~ claim 9, wherein the at least one surface section is warmed up to the softening temperature.

14. A method as in claim 13, wherein the warming is accomplished by means of a rubbing-rotating motion.

15. A method as in claim 14, wherein the rubbing-rotating motion is a rubbing-rotating motion similar to the high-speed grinding.

16. A method as in claim 13, wherein the warming is accomplished by treatment using laser radiation.

17. (Currently Amended) A method as in ~~any one of claims 13 to~~ claim 16, wherein during that process the surface temperature is at least 500 degrees C.

18. (Currently Amended) A method as in ~~any one of claims 8 to~~ claim 17, wherein a facet (8) is smoothed.

19. A method as in claim 18, wherein the facet is produced by means of the smoothing.

20. (Currently Amended) A rod lens system (2) that has at least one rod lens (3) as in ~~any one of claims 1 to~~ claim 7.

21. (Currently Amended) An endoscope (1) with a rod lens system (2) as in claim 20.